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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,887	04/16/2004	Manatesh Chakraborty	133737-1	1420

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CANTOR COLBURN LLP
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EXAMINER

WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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10/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

Office Action Summary	Application No. 10/826,887	Applicant(s) CHAKRABORTY ET AL.	
	Examiner JEFFREY WOLLSCHLAGER	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-27 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) 9,11,21,23 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10,12-20,22,24-26 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

Applicant's amendment to the claims filed August 6, 2010 has been entered. Claims 1 and 32 are currently amended. Claims 9, 11, 21, 23 and 27 remain withdrawn from further consideration. Claims 1-3, 5-8, 10, 12-20, 22, 24-26 and 32-34 are under examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 15-20, 22, 24-26 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al. (US 5,294,667) in view of Yamamoto et al. (JP 2000-167827).

Regarding claims 1, 15-20, 22, 24-26 and 32-34, Weiss et al. teach the basic claimed process of producing a compression molded PPE at a preferable temperature of 20-50 °C and a pressure up to 200 bar/0.22 ton per sq. cm/0.204 metric ton per sq. cm. The density of the compacted PPE is 0.5-1.1 g/cc and the viscosity of the PPE compacted is 0.3 to 0.7 dl/g.

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Further, the PPE compacts have a particle size of 0.5 mm to 20 mm (col. 2, lines 5-67; Abstract). Weiss et al. do not teach the compacts/pellets have the claimed diameter to height ratio. However, Yamamoto et al. teach that in the formation of PPE compacts/pellets/tablets aspect ratios preferably less than 2 are effective for extrusion productivity and ease of handling (paragraphs [0021-0023]).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching of Weiss et al. and Yamamoto et al. and to have formed the compact of Weiss et al. at a diameter to height ratio of less than 2, as suggested by Yamamoto et al., for the purpose, as suggested by Yamamoto et al., of producing a compact/pellet/tablet that is easy to handle and facilitates extrusion productivity. It is noted that the combination employs the same claimed materials and suggests the same claimed method steps. As such, it follows that the same claimed effects and physical properties would be achieved by the combined method.

Claims 2, 3, 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al. (US 5,294,667) in view of Yamamoto et al. (JP 2000-167827), as applied to claims 1, 15-20, 22, 24-26 and 32-34 above, and further in view of Modern Plastics Handbook, edited by Charles A. Harper, Knovel release date: November 20, 2002.

As to claims 2, 3, 5 and 6, Weiss et al do not expressly teach applying the pressure for a particular number of seconds. However, Modern Plastics Handbook discloses that the overall cycle times required for compression molding is determined based upon the molding material, the thickness/size of the part to be produced and the mold temperature (6.2.3, last full paragraph).

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Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching of Weiss et al. and Modern Plastics Handbook and to have optimized the required compression cycle time, including to times set forth in the claim, in order to achieve a compression molded product having the required density and size.

As to claim 7, Weiss et al. teach that compaction/compression molding of polyphenylene ether removes the air contained in the interstices of the loose powder which in turn reduces the proportion of fines and the risk of dust explosions (col. 2, lines 55-67).

Claims 8, 10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al. (US 5,294,667) in view of Yamamoto et al. (JP 2000-167827), as applied to claims 1, 15-20, 22, 24-26 and 32-34 above, and further in view of Gijzen (US 6,359,043).

As to claims 8, 10 and 12-14, the combination teaches the method set forth above. Additionally, Gijzen teach that adding various additives and binders such as polystyrene resin enhance the properties of PPE (col. 1, lines 35-40; col. 3, lines 25-30).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the method of Weiss et al. and to have employed additives and binders, as suggested by Gijzen, for the purpose of enhancing the properties of the product.

Response to Arguments

Applicant's arguments filed August 6, 2010 have been fully considered, but are moot in view of the new grounds of rejection necessitated by the amendment to the claims.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Wollschlager/
Primary Examiner
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September 30, 2010